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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,184	11/14/2005	Gilles Le Moal	PSA05005	1117

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EXAMINER

KOTTER, KIP T

ART UNIT	PAPER NUMBER
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3617

MAIL DATE	DELIVERY MODE
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12/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/527,184	LE MOAL ET AL.	
	Examiner	Art Unit	
	Kip Kotter	3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20 November 2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the wheel comprising "at least one balancing device on each side of its rim" as set forth in claim 15 must be shown or the feature(s) canceled from the claim(s). **No new matter should be entered.**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification does not describe the resin as being an organic binder charged with zinc flakes as set forth in claims 20 and 21. Nor does the specification describe the protective coating comprising two or more layers each comprising flakes containing zinc and a polymerized organic binder as set forth in claim 25.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 20, 21 and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the original disclosure does not describe the resin being an organic binder charged with zinc flakes. Note, the only explicit reference to an "organic" binder is found in lines 6-7 on page 8, which states the "epoxy resin organic coating is charged with *aluminum powder*" (emphasis added).

THIS IS A NEW MATTER REJECTION

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 11, 12, 24 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is insufficient antecedent basis for the limitation "the protective coating" in claims 11, 24 and 25. Also, there is insufficient antecedent basis for the limitation "the coating" in claim 12.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-6, 8, 13-15, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amyot et al. (U.S. Publication No. 2004/0007912 A1; previously cited) in view of Galvtech (newly cited non-patent literature).

Amyot et al. discloses a wheel balancing device **10** on a side of the rim **16** of a wheel that supports a tire **24** as shown in Fig. 2, wherein the wheel balancing device comprises a balancing weight **12** and a clip **14** adapted to be fixed to said wheel, said balancing weight, being made of a zinc aluminum alloy with at most trace amounts of copper as described in paragraph [0015],

wherein the material constituting the balance weight, Zamak 3, contains 96% zinc and 4% aluminum as described in paragraph [0015], and the balancing weight and clip are coated with anti-corrosion protective layers as described in paragraphs [0014] and [0020] that inherently comprise a binder; and the balancing weight is molded over a portion of the clip as described in paragraph [0027].

Amyot et al., however, fails to expressly disclose the anti-corrosion protective layer comprises flakes containing zinc. Instead, Amyot et al., teaches the use of a corrosion resistant paint that is rich in metallic powders, such as zinc powder, as described in column [0020].

Galvtech, however, teaches the advantages of using zinc flakes instead of zinc-rich paints, sprays, primers and metal coatings that contain zinc dust for providing cathodic protection.

As such, it would have been obvious to one having ordinary skill in the art to have substituted the zinc dust or powder in the zinc-rich paint of Amyot et al. for zinc flakes, such as taught by Galvtech, to provide greater binder uptake, improved cohesion, improved electrical conductivity and better overcoating properties for the anti-corrosion protective layer.

Regarding claims 13 and 15, it would have been obvious to one having ordinary skill in the art, as a mechanical expedient, to have used balancing devices having weights ranging from at least 5 g to at least 60 g on each side of the rim based upon the amount of tire imbalance, dimensions of the wheel and the intended use of the balance weight.

9. Claims 7, 10-12, 16-21, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amyot et al. in view of Galvtech, as applied to claims 1 and 8 above, and further in view of Nagashima (JP 03272347 A; previously cited).

Although Amyot et al., as modified by Galvtech, discloses a method of fabricating a wheel balancing device comprising the following steps: making a clip and molding a zinc alloy balancing weight over this clip, wherein the clip is coated with an alloy rich in zinc and a balancing weight coated with paint rich in flakes containing zinc and a binder, Amyot et al., as modified by Galvtech, fails to disclose a wheel balancing device wherein the clip and balance weight are conjointly dipped in a bath containing a polymerizable resin charged with flakes containing zinc and then cured before a second dipping and curing treatment. Amyot et al., as modified by Galvtech, also fails to expressly disclose multiple protective layers, epoxy resin binders and polymerized organic binders.

Nagashima teaches a wheel balancing device wherein multiple layers 7, 8, 9 of resin paint, which contain organic binders (epoxy resin, urethane resin and acryl resin) that would become polymerized after the curing process, are applied to the clip and balance weight conjointly.

From this teaching, it would have been obvious to one of ordinary skill in the art to have modified the wheel balancing device of Amyot et al., as modified by Galvtech, by applying multiple layers of resin paint to the clip conjointly with the balancing weight, such as taught by Nagashima, to help prevent galvanic corrosion, achieve desired physical properties, achieve a desired aesthetic appeal and to simplify the manufacture process of the wheel balance device.

To employ a dipping, centrifuging and curing process for applying the coatings would have been obvious to one of ordinary skill in the art as this is a notoriously well-known process for applying resin coatings.

Regarding claims 12 and 17, it would have been obvious to one of ordinary skill in the art to have modified the wheel balancing device of Amyot et al., as modified by Galvtech and Nagashima, by using pigments to achieve a desired appearance.

Response to Arguments

10. Applicant's arguments with respect to claims 1 and 16 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments with respect to dependant claims 10, 11, 18, 20, 21, 24 and 25 have been fully considered but they are not persuasive.

In response to Applicant's argument that "Amyot is completely silent as to the benefits of using organic resin or binder for its coating", note that it appears that Applicant is also completely silent as to the benefits of using *organic* resin or binding for its coating. Nonetheless, note that these claims are rejected under U.S.C. §103(a). As mentioned above in paragraph 9, Nagashima teaches the use of organic resins or binders for its coatings.

In response to Applicant's argument that "the person ordinary skill in the art would have no motivation to refer to Nagashima regarding a number of coating layers, and would have no motivation to increase a number of coating layers because of expected costs and manufacturing complexity involved, in the absences of expected improvements in corrosion resistance", note

that increasing the number of protective layers in Amyot et al., as modified by Galvtech, would improve corrosion resistance. Moreover, as noted above in paragraph 9 above, it would have also been obvious to one of ordinary skill in the art to apply multiple layers to achieve desired physical properties and a desired appearance.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Orr (U.S. Patent No. 4620873) teaches a zinc-based paint that contains zinc flakes for improving corrosion resistance.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kip Kotter whose telephone number is (571) 272-7953. The examiner can normally be reached on 9:00-4:00pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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